



November 20, 2008

Charles L.A. Terreni  
Chief Clerk and Administrator  
South Carolina Public Service Commission  
Post Office Drawer 11649  
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.  
Power Plant Performance Report  
Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of October 2008.

Sincerely,

*Len S. Anthony (by dhs)*

Len S. Anthony  
General Counsel  
Progress Energy Carolinas, Inc.

LSA/dhs  
Enclosures  
45612

c: John Flitter (ORS)

October 2008

The following units had no off-line outages during the month of October:

Brunswick Unit 1

Brunswick Unit 2

Harris Unit 1

Roxboro Unit 4

Robinson Unit 2

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 0:23 on September 26, and remained offline through the end of the month. The unit was offline for 744 hours during the month of October. The outage duration through the end of October was 863 hours and 37 minutes.
- B. Cause: Scheduled Refueling Outage
- C. Explanation: The unit was taken out of service for a scheduled refueling outage. In addition to refueling, required maintenance and inspections are being carried out during this outage.
- D. Corrective Action: Planed outage activities were in progress at the end of October.

Mayo Unit 1

Full Forced Outage

- A. Duration: The unit was taken out of service at 23:17 on October 23, and was returned to service at 2:22 on October 29, a duration of 123 hours and 5 minutes.
- B. Cause: Feedwater Heater Tube Leak & Generator Exciter Malfunction
- C. Explanation: The unit was taken out of service on October 23 to investigate and repair a tube leak in the feedwater heater. Maintenance activities were performed to correct the feedwater heater tube leak. Upon the completion of repairs, the unit was preparing to return to service at 11:44 on October 26. However, a malfunction occurred in the generator exciter, and the unit remained offline. Investigation into the exciter malfunction revealed the root cause was a failed contactor on the field flashing breaker. Maintenance activities to correct the failed exciter were conducted, and the unit returned to service upon completion of the exciter repair work on October 29.
- D. Corrective Action: Weld repairs were made to address the feedwater heater tube leak. After this work was completed, an attempt was made to return the unit to service, but a generator exciter malfunction prevented it from doing so. The replacement of a trip coil on the field flashing breaker and other maintenance work was performed to address the exciter malfunction. Upon completion of exciter repairs, the unit was returned to service.

Roxboro Unit 2

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 0:00 on October 4, and was returned to service at 3:11 on October 18, a duration of 339 hours and 11 minutes.
- B. Cause: Boiler Inspection
- C. Explanation: The unit was taken out of service for a planned boiler inspection.
- D. Corrective Action: Planned outage activities, including boiler inspection, periodic, preventative, and corrective maintenance were completed, and the unit was returned to service.

Roxboro Unit 3

Full Forced Outage

- A. Duration: The unit was taken out of service at 2:16 on October 19, and was returned to service at 8:44 on October 19, a duration of 6 hours and 28 minutes.
- B. Cause: Loss of Stator Cooling Water
- C. Explanation: The unit was taken out of service due to the loss of stator cooling water.
- D. Corrective Action: Maintenance work, including the replacement of a relay, was performed to address the loss of stator cooling water. Upon completion of the repairs, the unit was returned to service.

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	938 MW		938 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	716,845 MWH		7,264,324 MWH		2
Capacity Factor	102.72 %		88.17 %		
Equivalent Availability	100.00 %		86.84 %		
Output Factor	102.72 %		100.69 %		
Heat Rate	10,349 BTU/KWH		10,380 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,025,140	12.44	3
Partial Scheduled	0	0.00	59,226	0.72	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	30,027	0.36	6
Economic Dispatch	0	0.00	31	0.00	7
Possible MWH	697,872		8,239,392		8

\* See 'Notes for Nuclear Units' filed with the January 2008 report.

\*\* Gross of Power Agency

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	937 MW		937 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	699,951 MWH		8,043,184 MWH		2
Capacity Factor	100.40 %		97.72 %		
Equivalent Availability	99.87 %		97.30 %		
Output Factor	100.40 %		99.44 %		
Heat Rate	10,526 BTU/KWH		10,588 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	906	0.13	25,676	0.31	4
Full Forced	0	0.00	142,049	1.73	5
Partial Forced	0	0.00	83,701	1.02	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	697,128		8,230,608		8

\* See 'Notes for Nuclear Units' filed with the January 2008 report.

\*\* Gross of Power Agency

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	900 MW		900 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	686,147 MWH		7,808,045 MWH		2
Capacity Factor	102.47 %		98.77 %		
Equivalent Availability	100.00 %		97.00 %		
Output Factor	102.47 %		101.65 %		
Heat Rate	10,730 BTU/KWH		10,800 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	8,129	0.10	4
Full Forced	0	0.00	224,235	2.84	5
Partial Forced	0	0.00	8,939	0.11	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	669,600		7,905,600		8

\* See 'Notes for Nuclear Units' filed with the January 2008 report.

\*\* Gross of Power Agency

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	710 MW		710 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	-1,964 MWH		5,870,148 MWH		2
Capacity Factor	0.00 %		94.12 %		
Equivalent Availability	0.00 %		89.85 %		
Output Factor	0.00 %		104.39 %		
Heat Rate	0 BTU/KWH		10,712 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	528,240	100.00	613,168	9.83	3
Partial Scheduled	0	0.00	19,571	0.31	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	213	0.00	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	528,240		6,236,640		8

\* See 'Notes for Nuclear Units' filed with the January 2008 report.

	Month of October 2008		Twelve Month Summary		See Notes*
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MDC	742 MW		742 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	217,551 MWH		4,118,722 MWH		2
Capacity Factor	39.41 %		63.19 %		
Equivalent Availability	73.64 %		95.41 %		
Output Factor	47.22 %		65.23 %		
Heat Rate	11,476 BTU/KWH		10,688 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	44,854	8.13	81,830	1.26	3
Partial Scheduled	30,188	5.47	87,299	1.34	4
Full Forced	46,474	8.42	79,381	1.22	5
Partial Forced	23,981	4.34	50,711	0.78	6
Economic Dispatch	189,001	34.24	2,098,320	32.20	7
Possible MWH	552,048		6,516,264		8

\* See 'Notes for Fossil Units' filed with the January 2008 report.

\*\* Gross of Power Agency

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	671 MW		666 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	180,572 MWH		4,677,305 MWH		2
Capacity Factor	36.17 %		79.99 %		
Equivalent Availability	52.56 %		91.98 %		
Output Factor	74.47 %		87.30 %		
Heat Rate	9,164 BTU/KWH		9,184 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	227,592	45.59	330,713	5.66	3
Partial Scheduled	9,022	1.81	21,521	0.37	4
Full Forced	0	0.00	105,704	1.81	5
Partial Forced	243	0.05	14,707	0.25	6
Economic Dispatch	81,796	16.38	697,234	11.92	7
Possible MWH	499,224		5,847,216		8

\* See 'Notes for Fossil Units' filed with the January 2008 report.

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	705 MW		705 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	350,687 MWH		4,091,447 MWH		2
Capacity Factor	66.86 %		66.07 %		
Equivalent Availability	98.07 %		90.04 %		
Output Factor	67.44 %		70.87 %		
Heat Rate	11,288 BTU/KWH		11,267 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	415,104	6.70	3
Partial Scheduled	0	0.00	83,904	1.35	4
Full Forced	4,559	0.87	4,559	0.07	5
Partial Forced	5,577	1.06	113,317	1.83	6
Economic Dispatch	163,697	31.21	1,484,388	23.97	7
Possible MWH	524,520		6,192,720		8

\* See 'Notes for Fossil Units' filed with the January 2008 report.

	Month of October 2008		Twelve Month Summary		See Notes*
MDC	698 MW		698 MW		1
Period Hours	744 HOURS		8,784 HOURS		
Net Generation	346,456 MWH		3,807,128 MWH		2
Capacity Factor	66.71 %		62.09 %		
Equivalent Availability	99.94 %		86.50 %		
Output Factor	66.71 %		70.99 %		
Heat Rate	10,316 BTU/KWH		10,529 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	0	0.00	625,023	10.19	3
Partial Scheduled	0	0.00	117,848	1.92	4
Full Forced	0	0.00	21,813	0.36	5
Partial Forced	289	0.06	63,203	1.03	6
Economic Dispatch	172,567	33.23	1,493,946	24.37	7
Possible MWH	519,312		6,131,232		8

\* See 'Notes for Fossil Units' filed with the January 2008 report.

\*\* Gross of Power Agency

Plant	Unit	Current MW Rating	January 2007 - December 2007	October 2008	January 2008 - October 2008
Asheville	1	191	63.64	46.61	74.09
Asheville	2	185	73.17	61.21	63.09
Cape Fear	5	144	78.67	68.97	68.67
Cape Fear	6	172	72.38	62.42	60.43
Lee	1	74	62.15	12.49	59.62
Lee	2	77	62.47	37.12	48.53
Lee	3	248	66.38	19.89	40.71
Mayo	1	742	72.10	39.41	61.20
Robinson	1	176	74.63	64.63	66.00
Roxboro	1	369	78.01	76.67	80.09
Roxboro	2	671	80.06	36.17	77.18
Roxboro	3	705	74.37	66.86	64.79
Roxboro	4	698	62.40	66.71	69.38
Sutton	1	93	56.26	16.49	46.97
Sutton	2	102	63.19	20.23	56.27
Sutton	3	403	55.53	35.37	58.29
Weatherspoon	1	48	53.86	13.51	43.38
Weatherspoon	2	49	55.68	13.73	41.11
Weatherspoon	3	76	68.70	26.87	58.34
Fossil System Total		5,223	69.82	49.34	64.90
Brunswick	1	938	95.92	102.72	85.43
Brunswick	2	937	86.99	100.40	97.08
Harris	1	900	93.90	102.47	98.08
Robinson Nuclear	2	710	92.26	0.00	91.63
Nuclear System Total		3,485	92.25	81.03	93.09
Total System		8,708	78.79	62.02	76.18

Amended SC Fuel Rule  
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of  $\geq 92.5\%$  during the 12 month period under review. For the test period April 1, 2008 through October 31, 2008, actual period to date performance is summarized below:

Period to Date: April 1, 2008 to October 31, 2008

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period                      A = 16,423,558 MWH

B. Total number of hours during SCPSC test period                                      B = 5,136 hours

C. Nuclear system MDC during SCPSC test period (see page 2)                      C = 3,485 MW

D. Reasonable nuclear system reductions (see page 2)                                  D = 1,681,053 MWH

A. SC Fuel Case nuclear system capacity factor:  $[(A + D) / (B + C)] * 100 = 101.1\%$

NOTE:

If Line Item E  $> 92.5\%$ , presumption of utility's minimum cost of operation.

If Line Item E  $< 92.5\%$ , utility has burden of proof of reasonable operations.

Amended SC Fuel Rule  
Nuclear System Capacity Factor Calculation  
Reasonable Nuclear System Reductions  
Period to Date: April 1, 2008 to October 31, 2008

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	937 MW	900 MW	710 MW	3,485 MW
Reasonable refueling outage time (MWH)	644,015	0	0	613,168	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	436	111,503	229,188	213	
Reasonable coast down power reductions (MWH)	0	0	0	9,720	
Reasonable power ascension power reductions (MWH)	30,893	19,898	0	0	
Prudent NRC required testing outages (MWH)	3,866	12,008	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	6,145	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	679,210	149,554	229,188	623,101	
Total reasonable outage time exclusions [carry to Page 1, Line D]					1,681,053